

WHAT IS CLAIMED IS:

1. A reader/writer for sending/receiving a signal to/from the outside in a contactless manner through electromagnetic induction coupling, comprising:

5 a high voltage withstanding amplifier for amplifying an analog signal to be sent to the outside;

a plurality of resonance circuits for sending said analog signal amplified by said high voltage withstanding amplifier to the outside; and

10 a plurality of high voltage withstanding analog switching circuits provided correspondingly to said plurality of resonance circuits between said high voltage withstanding amplifier and said plurality of resonance circuits, each for electrically connecting/disconnecting said high voltage
15 withstanding amplifier to/from a corresponding one of said plurality of resonance circuits.

2. The reader/writer of Claim 1,

wherein each of said plurality of high voltage withstanding analog switching circuits includes:

20 a high voltage withstanding P-channel FET connected between a corresponding one of said plurality of resonance circuits and said high voltage withstanding amplifier;

a first resistor connected between a power supply
25 node for receiving a positive voltage at a given level and a

gate of said FET;

a second resistor connected between the gate of
said FET and a ground node for receiving a ground voltage and
having a resistance value smaller than a resistance value of
5 said first resistor;

a diode connected between said second resistor
and said ground node to be forward in a direction from said
second resistor to said ground node; and

a switch serially connected to said second
10 resistor and said diode between the gate of said FET and said
ground node for electrically connecting/disconnecting the
gate of said FET to/from said ground node.

3. The reader/writer of Claim 2,
wherein said FET is a junction FET, and
15 said positive voltage is higher than a positive maximum
value of an input signal to said FET.

4. An analog switching circuit comprising:
a high voltage withstanding P-channel FET, a source and
a drain thereof corresponding to input and output of said
20 analog switching circuit;

a first resistor connected between a power supply node
for receiving a positive voltage at a given level and a gate
of said FET;

a second resistor connected between the gate of said
25 FET and a ground node for receiving a ground voltage and

having a resistance value smaller than a resistance value of said first resistor;

a diode connected between said second resistor and said ground node to be forward in a direction from said second resistor to said ground node; and

a switch serially connected to said second resistor and said diode between the gate of said FET and said ground node for electrically connecting/disconnecting the gate of said FET to/from said ground node.

5 10 5. The analog switching circuit of Claim 4,

wherein said FET is a junction FET, and

said positive voltage is higher than a maximum value of an input signal to said FET.

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